## This is a CONTROLLED DOCUME(1) , ROCKY FLAIS PLANT

ENVIRONMENTAL MANAGEMENT DEPARTAT

This is a REC STORING

COPY # 665

## MOUND SITE SOURCE REMOVAL

## CSFS HOT SPOT REMOVAL AND DRUM SAMPLING

## **Activity Hazard Analysis**

5-14-97

Activity	Hazard	Preventative Measures					
All site activities	General work hazards	All personnel will wear steel toed shoes, safety glasses with side shields, hard hats, reflective vests, and hearing protection as applicable in the support zone					
	Heat stress	Heat stress monitoring will be conducted in regards to work load and PPE worn					
	Cold stress	Cold stress monitoring will be conducted Proper clothing will be available to all personnel and administrative controls will be adhered to					
	Noise	Noise monitoring will be conducted Where necessary personnel will wear hearing protection. In addition, all personnel will participate in the RFETS Hearing Conservation Program if necessary					
Traversing the site	Slip, trips, falls	Care will be taken when traversing the site especially when wearing PPE and carrying equipment All trip hazards will be immediately removed or marked when identified					
Lifting equipment and materials	Back injury	Proper lifting techniques will be used and heavy equipment, where feasible, will be utilized to move heavy loads					
Handling equipment and materials	Pinch points and sharp edges	Care will be taken when pinch points and sharp edges exist and heavy duty leather work gloves will be worn					

Activity	Hazard	Preventative Measures					
Using hand tools	Hand tools in unsafe operating condition	Hand tools will be inspected by the user prior to each use					
	Improper use of hand tools	Hand tools will be utilized for their intended use and operated in accordance with HSP-12 10 Guards will be in place and no modifications will be made					
	Electrical shock	Portable power tools will be plugged into a GFCI protected outlet and will be UL listed and double insulated Cords will be inspected by the user and protected from unnecessary damage. Any tool whose cord shows signs of damage or deterioration will be immediately removed from service.					
Use of generators	Electrical shock	Extension cords will be intended for outdoor use, inspected by the user, and protected from unnecessary damage. Any extension cords which show signs of damage or deterioration will be immediately removed from service.					
	Electrical shock	Cords will be plugged into a GFCI protected outlet and the generator will be properly grounded. The GFCI will be tested by the user daily prior to the beginning of each shift.					
	Fire	At a minimum, a 10 lb ABC fire extinguisher will be located in the work area and next to the generator All refueling will be conducted at the beginning of the shift when the generators are cool					
	Use of gasoline	Follow recommendations on MSDS (see Appendix C)					

Activity	Hazard	Preventative Measures						
Backhoe operation	Backhoe in poor operating condition	The backhoe will be inspected prior to entering RFETS. The operator will inspect and document the backhoe prior to the beginning of each shift						
	Improper operation of the backhoe	Operators will be properly trained in the use and limitations of the backhoe						
	Ground personnel being struck with backhoe or falling loads	Ground personnel will wear orange vests, stay at least 20' away from the backhoe, and maintain line of sight with the operator						
	Other equipment being struck with backhoe	Backhoe operations will be conducted in a deliberate safe manner A spotter will be required when backing the backhoe						
Use of Level B respiratory protection	Physical fatigue	Medical approval will be required for personnel						
	Improper face to facepiece seal	Respirator specific fit test approval will be required for personnel						
	Improper inspection or use of respirator	Personnel will be trained in the inspection, use, and limitations of the specific respirator worn						
	Unsecured airline bottles on backhoe	Airline bottles will be inspected by the user prior to and during each shift						
Moving jersey barriers with the backhoe	Dropping or tipping the jersey barrier	The backhoe will not lift the barrier and personnel will stay back during the pushing or dragging of barrier Chains or cables will be inspected prior to use						
Excavating contaminated soil and sampling drums	Skin exposure to volatile organic compounds	Personnel in the EZ/CA will wear Level B PPE and limit contact with contaminated soil						

Activity	Hazard	Preventative Measures						
Excavating contaminated soil and sampling drums (cont)	Inhalation of volatile organic compounds	Personnel in the EZ/CA will wear Level B respiratory protection CRZ/RBA and support zone work controls will be based on perimeter real-time VOC monitoring						
	Skin exposure to radionuclides in soil	Personnel in the EZ/CA will wear Level B PPE and limit contact with contaminated soil						
	Inhalation of radionuclides	Personnel in the EZ/CA will wear Level B respiratory protection CRZ/RBA and support zone work controls will be based on perimeter air monitoring						
Obtaining FIDLER readings at the backhoe bucket	Ground personnel being struck with backhoe	Prior to the RCT approaching the bucket, the operator will set the bucket on the ground, disengage the hydraulic system, set the parking brake, and give a hand signal indicating that the RCT may approach						
Moving drums of contaminated soil by hand	Dropping or tipping of drums Back injury	Proper drums moving techniques will be used by personnel Once at the stepoff pad, a fork truck with a drum grabber will be used						
Using fork truck with drum grabber to move drums	Fork truck in poor operating condition	The operator will inspect and document the fork truck prior to the beginning of each shift						
	Improper operation of fork truck	Operators will hold a current Fork Truck Operator Permit and all operations will be in accordance with HSP-9 06						
	Ground personnel being struck with fork truck	Ground personnel will wear orange vests and maintain line of sight with the operator						
	Other equipment being struck with fork truck	Fork truck operations will be conducted in a deliberate safe manner A spotter will be required when backing the fork truck						

Activity	Hazard	Preventative Measures					
Using fork truck with drum grabber to move drums (cont)	Injury resulting from unsecured loads	The drum grabber will be inspected for proper operation prior to use When moving drums, personnel will stay back a minimum of ten feet					
Spraying water for dust control	Pump malfunction or hose rupture	Pumps and hoses will be inspected by the user prior to use The hoses will be protected from unnecessary damage					

Approved	Signature	Date
RMRS Project Manager-Wayne Sproles	NRS	15-14-97
RMRS H&S Supervisor-Peggy Schreckengast	Beggy Schuckungast	1 5-14-97
RMRS Radiological Coordinator-Jerry Andersoi		,5/1497
SSOC Radiological Engineer-Scott Newsom	God a Vustem	15-14-97

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